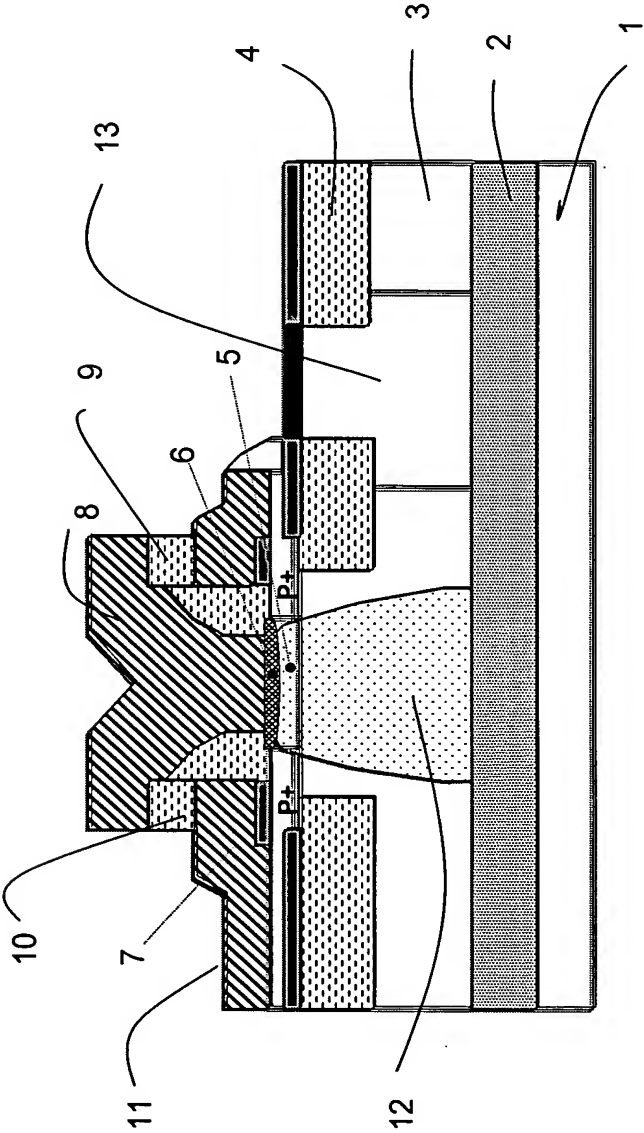


FIG. 1 (Prior Art)



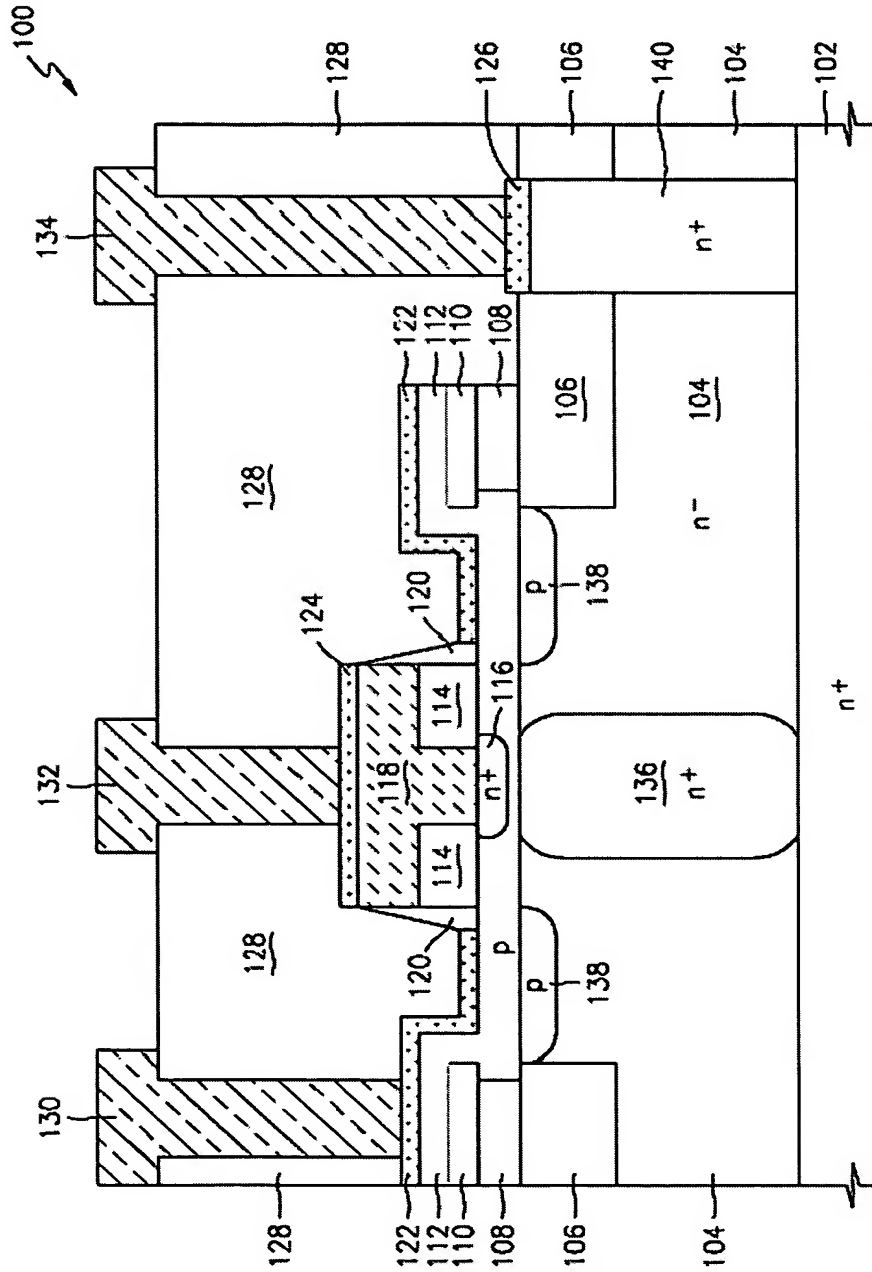


FIG. 2

Fig. 1 is a cross-sectional view of a semiconductor device. It shows a substrate 102 with a p+ region. A layer 104 is formed on the substrate, containing an n- region and an n+ region. A layer 106 is formed on layer 104, containing a p+ region on the right. A contact 140 is formed on the n+ region of layer 104.

[illegible]

FIG. 3(C)

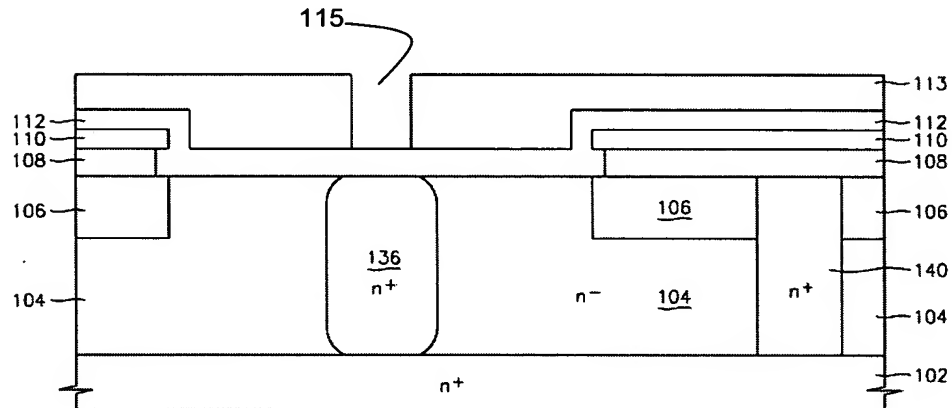
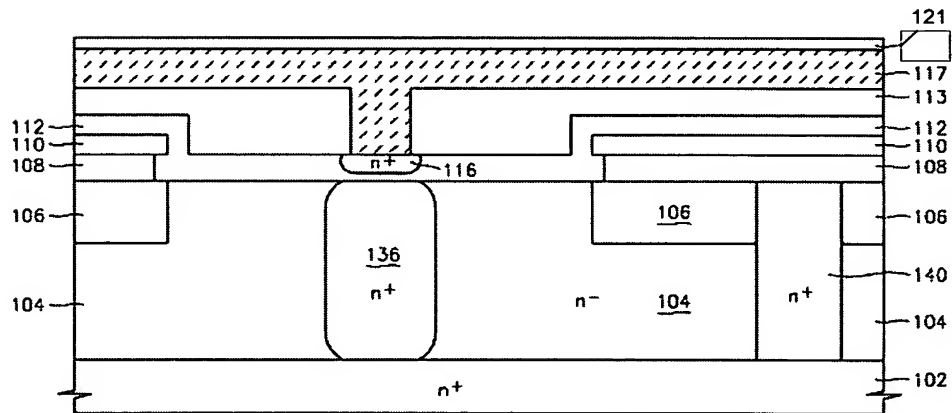


FIG. 3(D)



A cross-sectional view of a semiconductor device. The structure is built on a substrate 102. A layer 104 is formed on the substrate, containing a central n+ region 136 and two p regions 138. Above the p regions 138 are two n+ regions 114, which are part of a larger n+ region 116. The n+ regions 114 are separated by a p region 120. The n+ regions 114 are covered by a layer 118. The n+ regions 114 are also covered by a layer 110, which is part of a larger n+ region 112. The n+ regions 114 are also covered by a layer 108, which is part of a larger n+ region 106. The n+ regions 114 are also covered by a layer 104, which is part of a larger n+ region 104.

[illegible]

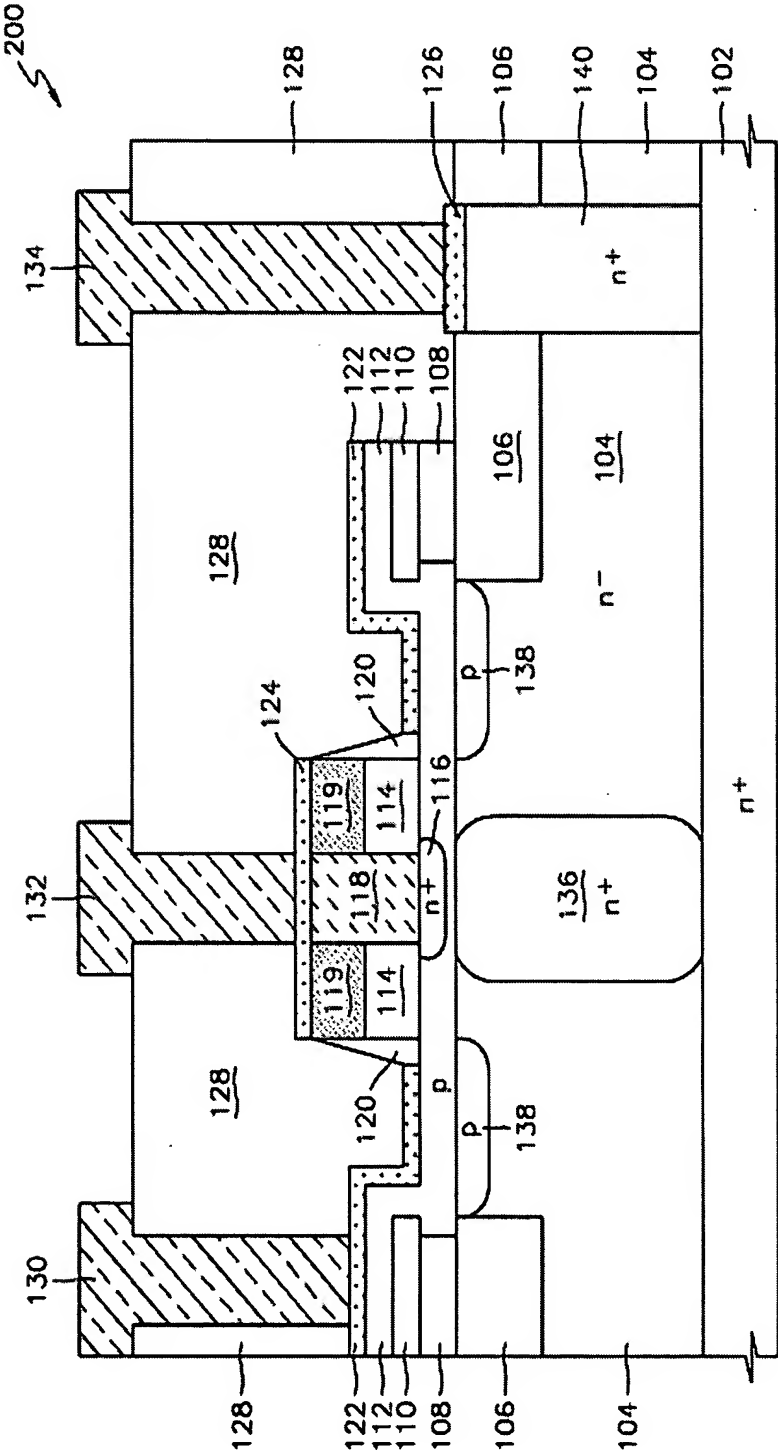


FIG. 4



FIG. 5

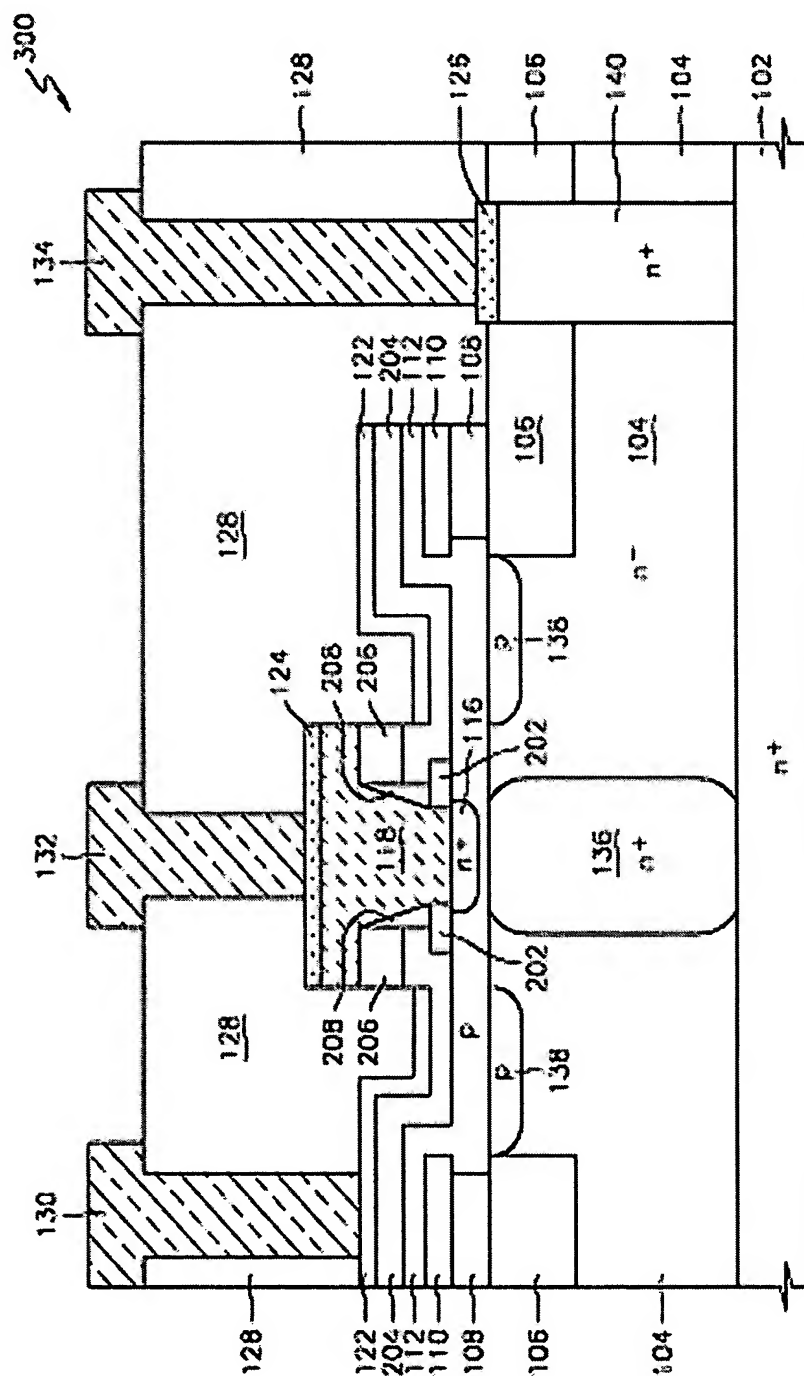


FIG. 6

115

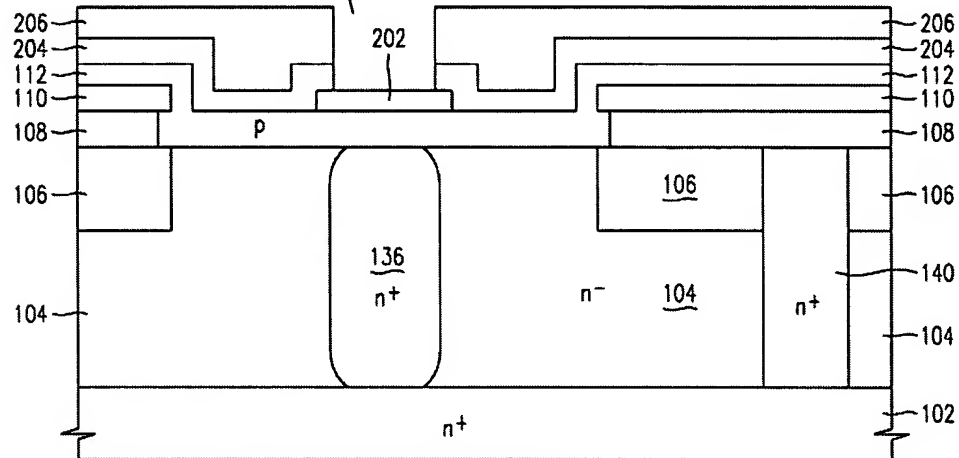
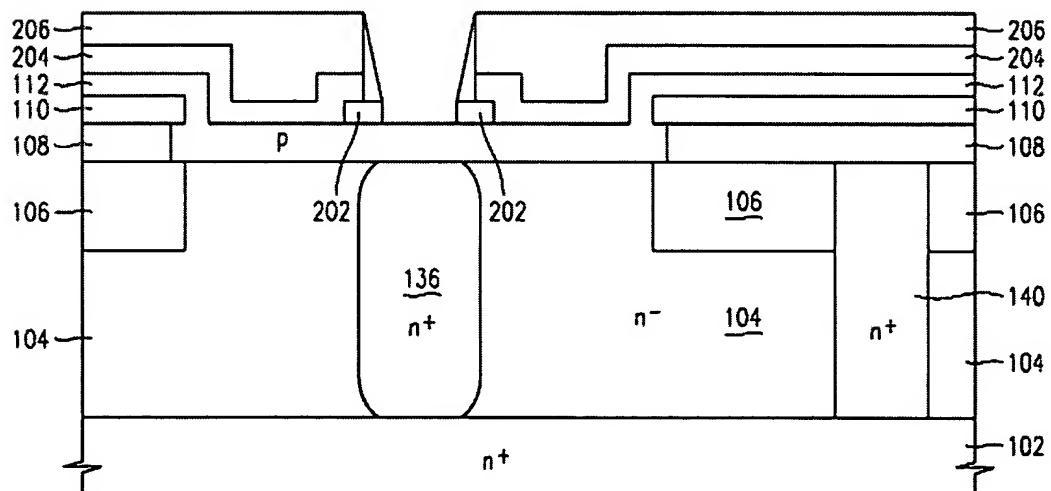


FIG. 7(B)



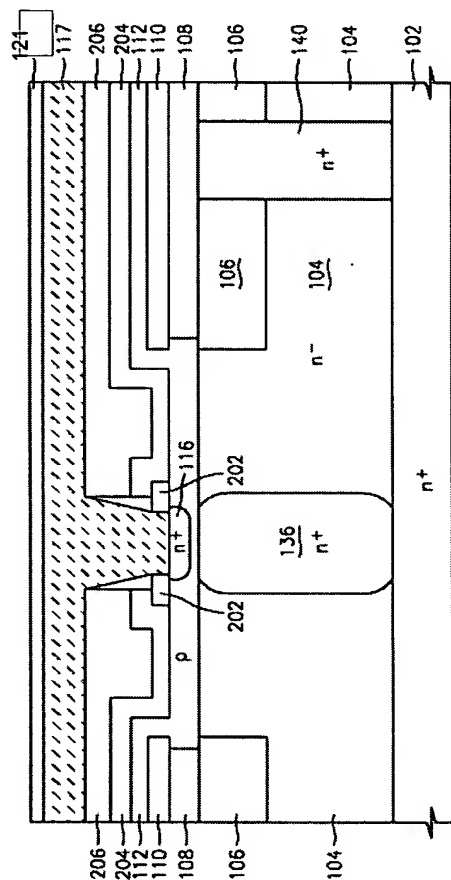


FIG. 7(C)

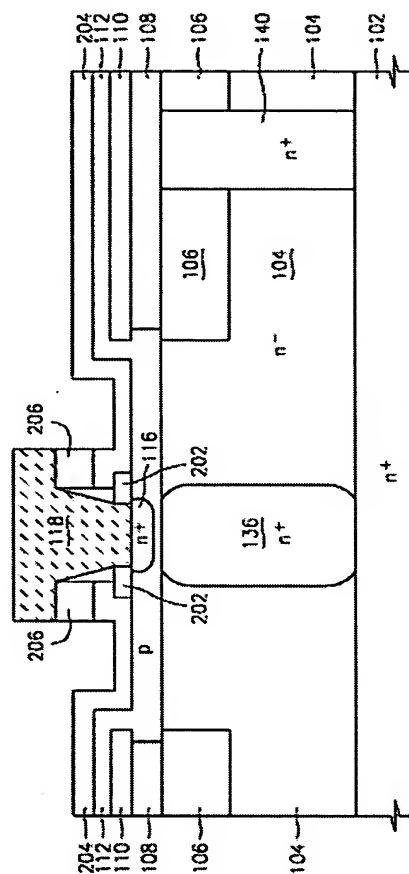


FIG. 7(D)

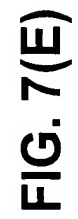


FIG. 7(E)